

# Comparision of Protein Sequences

201A	201B	hbcl-w	MATPASAPDT	RALVAD	DFVGY	KLRQKGYVCG	AGPGEGPAAD	PLHQAMRAAG	50
		mbcl-w	.....T.....	.....A.....	.....	.....	.....	.....	
		hbcl-y	.....A.....	.....E.....	.....	.....	.....	.....	
		rbcl-y	.....T.....	.....A.....	.....	.....	.....	.....	
		hbcl-w	DEFETRFRRT	FSDLAAQLHV	TPGSAQQRFT	QVSDELFQGG	PNWGRLVAFF		100
		mbcl-w	.....	.....	.....	.....	.....	.....	
		hbcl-y	.....	.....	.....	.....	.....	.....	
		rbcl-y	.....	.....	.....	.....	.....	.....	
		hbcl-w	VFGAALCAES	VNKEMEPLVG	QVOEWMVAYL	ETRLADWIHS	SGGWAEFTAL		150
		mbcl-w	.....	.....	...D...A...	.....	.....	.....	
		hbcl-y	.....	.....	...E...A...	.....	.....	.....	
		rbcl-y	.....	.....	...D...T...	.....	.....	.....	
		hbcl-w	YGDGALEEAR	RLREGNWASV	RTVLTGAVAL	GALVTVGAF	ASK		193
		mbcl-w	.....	.....	.....	.....	.....	.....	
		hbcl-y	.....	.....	.....	.....	.....	.....	
		rbcl-y	.....	.....	.....	.....	.....	.....	

### Comparison of Nucleotide Sequences

Human bcl-w (SEQ ID NO: 6)

Human *bcl-1*- $\gamma$  (SEQ ID NO: 2 of the '201 Patent)

**Rat bcl-y** (SEQ ID NO: 1 of the '201 Patent)

hbcl-w	atg gcg acc cca gcc tcg gcc cca gac aca cgg gct ctg gtg gca gac	48
hbcl-y		
rbcl-y	a a a t	
hbcl-w	ttt gta ggt tat aag ctg agg cag aag ggt tat gtc tgt gga gct ggc	96
hbcl-y		
rbcl-y	c a	
hbcl-w	ccc ggg gag ggc cca gca gct gac ccg ctg cac caa gcc atg cgg gca	144
hbcl-y		
rbcl-y	t a c	
hbcl-w	gct gga gat gag ttc gag acc cgc ttc cgg cgc acc ttc tct gat ctg	192
hbcl-y		
rbcl-y	c t c	
hbcl-w	gcg gct cag ctg cat gtg acc cca ggc tca gcc cag caa cgc ttc acc	240
hbcl-y		
rbcl-y	c a c	
hbcl-w	cag gtc tcc gac gaa ctt ttt caa ggg ggc ccc aac tgg ggc cgc ctt	288
hbcl-y		
rbcl-y	t t c t	
hbcl-w	gta gcc ttc ttt gtc ttt ggg gct gca ctg tgt gct gag agt gtc aac	336
hbcl-y		
rbcl-y	g a c	
hbcl-w	aag gag atg gaa cca ctg gtg gga caa gtg cag gag tgg atg gtg gcc	384
hbcl-y		
rbcl-y	a a g t t a	
hbcl-w	tac ctg gag acg cgg ctg gct gac tgg atc cac agc agt ggg ggc tgg	432
hbcl-y		
rbcl-y	a c t	
hbcl-w	gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gcg cgg	480
hbcl-y		
rbcl-y	a	
hbcl-w	cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg	528
hbcl-y		
rbcl-y		
hbcl-w	gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc	576
hbcl-y		
rbcl-y	t	
hbcl-w	aag tgaa	583
hbcl-y		
rbcl-y		

# Comparison of Nucleotide Sequences

Murine bcl-w (SEQ ID NO: 6)

Human bcl-y (SEQ ID NO: 2 of the '201 Patent)

Rat bcl-y (SEQ ID NO: 1 of the '201 Patent)

mbcl-w	atg gcg acc cca gcc tca acc cca gac aca cgg gct cta gtg gct gac	48
hbcl-y	g g g aa	
rbcl-y		
mbcl-w	ttt gta ggc tat agg ctg agg cag aag ggt tat gtc tgt gga gct ggc	96
hbcl-y	t a	
rbcl-y	a a	
mbcl-w	cct ggg gaa ggc cca gcc gcc gac ccg ctg cac caa gcc atg cgg gct	144
hbcl-y	c g a t a a	
rbcl-y	a	
mbcl-w	gct gga gac gag ttt gag acc cgt ttc cgc cgc acc ttc tct gac ctg	192
hbcl-y	t c c g g t	
rbcl-y	c g	
mbcl-w	gcc gct cag cta cac gtg acc cca ggc tca gcc cag caa cgc ttc acc	240
hbcl-y	g g t a	
rbcl-y		
mbcl-w	cag gtt tcc gac gaa ctt ttc caa ggg ggc cct aac tgg ggc cgt ctt	288
hbcl-y	c t t c c	
rbcl-y	c	
mbcl-w	gtg gca ttc ttt gtc ttt ggg gct gcc ctg tgt gct gag agt gtc aac	336
hbcl-y	a c a	
rbcl-y		
mbcl-w	aaa gaa atg gag cct ttg gtg gga caa gtg cag gat tgg atg gtg gcc	384
hbcl-y	g g a a c g a	
rbcl-y	a	
mbcl-w	tac ctg gag aca cgt ctg gct gac tgg atc cac agc agt ggc ggc tgg	432
hbcl-y	g g g	
rbcl-y	c t g	
mbcl-w	gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gca cgg	480
hbcl-y	g	
rbcl-y		
mbcl-w	cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg	528
hbcl-y		
rbcl-y		
mbcl-w	gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc	576
hbcl-y		
rbcl-y	t	
mbcl-w	aag tga	582
hbcl-y		
rbcl-y		